

Amendments to the Claims:

Please amend the claims as follows:

1. (Original) A G0 transgenic chimera bird
which is introduced an exogenous antibody gene with a replication-defective retrovirus
vector, and
produces an antibody derived from a transgene in at least one of blood, albumen, and
egg yolk.
2. (Original) The G0 transgenic chimera bird according to Claim 1,
wherein a class of a constant region of the antibody is human IgG.
3. (Original) The G0 transgenic chimera bird according to Claim 1,
wherein a subclass of a constant region of the antibody is human IgG1.
4. (Original) The G0 transgenic chimera bird according to Claim 1,
wherein the constant region of the antibody is quail IgG, chicken IgG, or mouse IgG.
5. (Currently amended) The G0 transgenic chimera bird according to ~~any one of~~
~~Claims 1 to 4~~ Claim 1,
wherein the antibody gene is controlled by a constitutive promoter.
6. (Original) The G0 transgenic chimera bird according to Claim 5,
wherein the constitutive promoter is chicken β -actin promoter.
7. (Currently amended) The G0 transgenic chimera bird according to ~~any one of~~
~~Claims 1 to 6~~ Claim 1,
wherein the retrovirus vector is a vector derived from Moloney murine leukemia virus.
8. (Currently amended) The G0 transgenic chimera bird according to ~~any one of~~
~~Claims 1 to 7~~ Claim 1,
wherein the retrovirus vector is a VSV-G pseudo type one.

9. (Currently amended) The G0 transgenic chimera bird according to ~~any one of Claims 1 to 8~~ Claim 1,
wherein the bird is a chicken or quail.

10. (Currently amended) The G0 transgenic chimera bird according to ~~any one of Claims 1 to 9~~ Claim 1,
wherein the antibody is a chimera antibody.

11. (Original) The G0 transgenic chimera bird according to Claim 10,
which contains not less than 0.5 µg/ml of the antibody in blood.

12. (Original) The G0 transgenic chimera bird according to Claim 11,
which contains not less than 5 µg/ml of the antibody in blood.

13. (Original) The G0 transgenic chimera bird according to Claim 10,
which contains not less than 0.1 µg/ml of the antibody in albumen.

14. (Original) The G0 transgenic chimera bird according to Claim 13,
which contains not less than 1 µg/ml of the antibody in albumen.

15. (Original) The G0 transgenic chimera bird according to Claim 10,
which contains not less than 0.1 µg/ml of the antibody in egg yolk.

16. (Original) The G0 transgenic chimera bird according to Claim 15,
which contains not less than 1 µg/ml of the antibody in egg yolk.

17. (Currently amended) The G0 transgenic chimera bird according to ~~any one of Claims 1 to 9~~ Claim 1,
wherein the antibody is an scFv-Fc antibody.

18. (Original) The G0 transgenic chimera bird according to Claim 17,
which contains not less than 20 µg/ml of the antibody in blood.

19. (Original) The G0 transgenic chimera bird according to Claim 18,

which contains not less than 2000 µg/ml of the antibody in blood.

20. (Original) The G0 transgenic chimera bird according to Claim 17, which contains not less than 5 µg/ml of the antibody in albumen.

21. (Original) The G0 transgenic chimera bird according to Claim 20, which contains not less than 500 µg/ml of the antibody in albumen.

22. (Original) The G0 transgenic chimera bird according to Claim 17, which contains not less than 5 µg/ml of the antibody in egg yolk.

23. (Original) The G0 transgenic chimera bird according to Claim 22, which contains not less than 500 µg/ml of the antibody in egg yolk.

24. (Currently amended) A production method of an antibody which comprises producing the G0 transgenic chimera bird according to ~~any one of Claims 1 to 23~~ Claim 1, and recovering the antibody from blood and/or an egg of said G0 transgenic chimera bird.

25. (Original) A production method of a G0 transgenic chimera bird which comprises incubating a bird fertile egg, infecting an early embryo after and exclusive of a blastodermal period immediately after the spawning with a replication-defective retrovirus vector, and then hatching the embryo.

26. (Original) The production method of a G0 transgenic chimera bird according to Claim 25, which comprises incubating a bird fertile egg, infecting an early embryo after the lapse of 24 hours or more from the start of the incubation with a replication-defective retrovirus vector, and then hatching the embryo.

27. (Currently amended) The production method of a G0 transgenic chimera bird according to Claim 25 [[or 26]], which comprises incubating a bird fertile egg, and microinjecting a replication-defective retrovirus vector to a heart or blood vessel formed in the early embryo.

28. (Currently amended) The production method of a G0 transgenic chimera bird according to Claim 25 ~~[[or 26]]~~,

which comprises incubating a bird fertile egg, and microinjecting a replication-defective retrovirus vector to a heart or blood vessel formed in the early embryo formed after the lapse of 24 hours or more from the start of the incubation.

29. (Currently amended) The production method of a G0 transgenic chimera bird according to ~~any one of Claims 25 to 28~~ Claim 25,

which comprises microinjecting a replication-defective retrovirus vector having the titer of not less than 1×10^7 cfu/ml.

30. (Original) The production method of a G0 transgenic chimera bird according to Claim 29,

which comprises microinjecting a replication-defective retrovirus vector having the titer of not less than 1×10^8 cfu/ml.

31. (Original) The production method of a G0 transgenic chimera bird according to Claim 30,

which comprises microinjecting a replication-defective retrovirus vector having the titer of not less than 1×10^9 cfu/ml.

32. (Currently amended) The production method of a G0 transgenic chimera bird according to ~~any one of Claims 25 to 31~~ Claim 25,

wherein the retrovirus vector is a vector derived from Moloney murine leukemia virus.

33. (Currently amended) The production method of a G0 transgenic chimera bird according to ~~any one of Claims 25 to 32~~ Claim 25,

wherein the retrovirus vector is a VSV-G pseudo type one.

34. (Currently amended) The production method of a G0 transgenic chimera bird according to ~~any one of Claims 25 to 33~~ Claim 25,

wherein the bird is a chicken or quail.

35. (Currently amended) The production method of a G0 transgenic chimera bird according to ~~any one of Claims 25 to 34~~ Claim 25,

wherein a gene sequence not derived from a retrovirus is contained in a transgene incorporated into a replication-defective retrovirus vector.

36. (Original) The production method of a G0 transgenic chimera bird according to Claim 35,

wherein the gene sequence not derived from a retrovirus is a gene sequence controlled by chicken β -actin promoter.

37. (Currently amended) The production method of a G0 transgenic chimera bird according to Claim 35 [[or 36]],

wherein the gene sequence not derived from a retrovirus is a gene sequence coding for an antibody gene.

38. (Original) The production method of a G0 transgenic chimera bird according to Claim 37,

wherein the antibody gene is a chimera antibody gene.

39. (Original) The production method of a G0 transgenic chimera bird according to Claim 37,

wherein the antibody gene is an scFv-Fc antibody gene.

40. (Currently amended) The production method of a G0 transgenic chimera bird according to Claim 35 [[or 36]],

wherein the gene sequence not derived from a retrovirus is a gene sequence coding for a fusion protein gene.

41. (Currently amended) A G0 transgenic chimera bird

which is produced by the method according to ~~any one of Claims 25 to 40~~ Claim 25.

42. (New) A production method of a transgenic bird,

which comprises mating the G0 transgenic chimera bird produced by the method according to Claim 25 with a mating type allogeneic bird, and then hatching the egg.

43. (New) The production method of a transgenic bird according to Claim 42,

wherein the mating type allogeneic bird is the G0 transgenic bird produced by the method according to Claim 25 or an offspring thereof.

44. (New) A G1 transgenic bird,
which is obtainable by mating the G0 transgenic bird produced by the method according to Claim 25 with a mating type allogeneic bird, and then hatching the egg.

45. (New) The G1 transgenic bird according to Claim 44,
wherein the mating type allogeneic bird is the G0 transgenic bird produced by the method according to Claim 25 or an offspring thereof.

46. (New) A production method of a transgenic bird,
which comprises further mating the G1 transgenic bird according to Claim 44, and then hatching the egg.

47. (New) A G2 transgenic bird or an offspring thereof,
which is obtainable by further mating the G1 transgenic bird according to Claim 44, and then hatching the egg.

48. (New) A production method of a protein,
which comprises extracting the objective protein from a somatic cell, blood or an egg of the transgenic bird produced by the method according to Claim 42.

49. (New) An egg laid by the G0 transgenic chimera bird according to Claim 41,
which contains not less than 1 mg of a heterogeneous protein derived from a transgene.

50. (New) An egg laid by the G0 transgenic chimera bird according to Claim 41,
which contains not less than 20 mg of a heterogeneous protein derived from a transgene.

51. (New) An egg laid by the G0 transgenic chimera bird according to Claim 41,
which contains not less than 100 mg of a heterogeneous protein derived from a transgene.

52. (New) An egg laid by the G0 transgenic chimera bird according to Claim 41, which contains not less than 200 mg of a heterogeneous protein derived from a transgene.

53. (New) An egg laid by the G1 transgenic chimera bird according to Claim 44 or an offspring thereof, which contains not less than 1 mg of a heterogeneous protein derived from a transgene.

54. (New) An egg laid by the G1 transgenic bird according to Claim 44 or an offspring thereof, which contains not less than 20 mg of a heterogeneous protein derived from a transgene.

55. (New) An egg laid by the G1 transgenic bird according to Claim 44 or an offspring thereof, which contains not less than 100 mg of a heterogeneous protein derived from a transgene.

56. (New) An egg laid by the G1 transgenic bird according to Claim 44 or an offspring thereof, which contains not less than 200 mg of a heterogeneous protein derived from a transgene.

57. (New) A selection method of a germline transgenic chimera bird, which comprises confirming a transgene in the sperm of a male G0 transgenic bird.

58. (New) A selection method of a transgenic bird, which comprises confirming a transgene-derived protein expression in blood.

59. (New) A selection method of a G0 transgenic chimera bird, which comprises confirming a transgene-derived protein expression in blood.